

ANNUAL REPORT 2022-2023



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INTRODUCTION TO THE SCHOOL

Advanced Math and Science Academy Charter School			
Type of Charter	Commonwealth	Location	Marlborough, MA
Regional or Non-Regional	Regional	Districts in Region	Marlborough, Clinton, Maynard, Hudson
Year Opened	2005	Year(s) Renewed	2010, 2015, 2020
Maximum Enrollment	966	Enrollment for 2022-2023	966
Chartered Grade Span	6-12	Current Grade Span	6-12
Number of Instructional Days per School Year (as stated in the charter)	180	Students on Waitlist for 2022-2023	825
Number of Instructional Days during 2022-2023 School Year	180		
School Hours	7:55-2:45 (Monday-Friday) 7:55-11:07 (Half Days-total 7) 7:55-11:45 (Final Exams-total 4)	Age of School in 2022-23	18
Mission Statement The Advanced Math and Science Academy Charter School will create an atmosphere of celebration of knowledge where children of all backgrounds and abilities excel in all subjects, especially in math, science, and technology, empowering them to succeed in the workplace in our modern high-tech world.			

SCHOOL PERFORMANCE AND PROGRAM IMPLEMENTATION

FAITHFULNESS TO THE CHARTER

CRITERION 1: MISSION AND KEY DESIGN ELEMENTS

- **Celebrate academic knowledge and inspire an appreciation of learning.**

AMSA provides the opportunity for all students to participate in the American Mathematics Competitions that are designed to promote the development and enhancement of problem-solving skills and a love for learning.

AMSA students are offered many choices of academic clubs and activities. Students are encouraged to participate in academic endeavors beyond school hours that complement their studies and allow them to focus deeper into their individual passions.

- **Implement an educational model that is highly structured, and each year consists of continuous, logically organized, and interconnected multi-year courses (Executive Summary) in which teachers introduce, and build upon, fundamental concepts and theories in math, science, computer science, and the humanities, preparing students for college and professional life.**

AMSA's program prepares and encourages students to participate in Advanced Placement studies as early as 10th grade and offers a wide selection of courses that are available to students who are inspired to take the challenge and strive for excellence.

The Counseling Department provides seminars for all juniors and seniors that focus on college preparation, college applications, and career planning. This includes essay writing, financial aid guidance, and a strong focus on mental health and wellness.

- **Cultivate a generation of leaders (and collaborators), especially in math, science, and technology that requires full commitment from the school to ensure that every student is challenged at the maximum of their ability and current intellectual preparedness with the goal of further advancing this "maximum" level.**

*AMSA has implemented **Panorama**, a data driven program used to improve the school climate and culture, teaching and learning, family and community engagement, and student' social-emotional learning. The program allows us to identify and track students who are considered the "lowest performing", providing data that guides strategies for narrowing learning gaps . The 2022 Next Generation MCAS will serve as our baseline.*

AMSA offers many opportunities for participation in research and internships within our science, engineering/technology, and computer science departments.

For supporting evidence regarding faithfulness to our charter and our mission, please refer to the **Accountability Plan Performance** beginning on page 17 .

Amendments to the Charter 2022-2023

Request Date	Amendment Requested	Approved
12/02/22	Amend bylaws providing a provision to create a temporary position, Director of Capital Projects, that will report directly to the Board of Trustees. * This amendment will not be implemented.	12/22/22 DESE Notified 7/18/23

CRITERION 2: ACCESS AND EQUITY

Please use the following link to view AMSA's most recent **publicly available** student discipline data: [AMSA-Charter-School's-Discipline-Data-Report](#)

2021-22 Student Discipline (Please note: DESE provides data from the previous school year)					
Student Group	Total Number of Students	Students Disciplined	Percent In-School Suspension	Percent Out-of-School Suspension	Percent Emergency Removal
All Students	981*	52	2	3.8	0.0
English Learner	26	6	15.4	7.7	0.0
Economically Disadvantaged	153	11	3.9	3.9	0.0
Students with Disabilities	70	10	8.6	8.6	0.0
High Needs	281	22	3.6	5	0.0
Female	454	11	0.9	1.5	0.0
Male	522	40	3.1	5.6	0.0
American Indian or Alaska Native	0	0	0.0	0.0	0.0
Asian	142	3	0.0	0.0	0.0
African American/Black	21	2	0.0	0.0	0.0
Hispanic/Latino	74	8	4.1	8.1	0.0
Multi-race, Non-Hispanic/Latino	63	2	0.0	0.0	0.0
Native Hawaiian or Pacific Islander	0	0	0.0	0.0	0.0
White	681	37	1.9	4.1	0.0

**The All Students number of 981 is higher than AMSA's enrollment cap of 966 because it includes students who withdrew during the school year.*

Using the 2021-2022 Student Discipline Data, AMSA noted a higher rate of suspension for ELL students and students with disabilities. AMSA's Administration Team will develop a targeted intervention plan to address the higher rate of suspension for ELL students and students with disabilities, to be implemented during the 2023-2024 school year.

In 2022-2023 AMSA continued the peer mediation program in partnership with a community-based mediation agency. This program is designed to help students resolve conflicts with each other peacefully and constructively before they escalate to the point of requiring a serious disciplinary response. During the 2022-2023 school year more than 50 mediations were conducted by the peer mediation program. Both deans met with representatives from several area school districts throughout the year to share practices related to running a successful peer mediation program. Due to a large number of trained mediators graduating, a new class of peer mediators was selected at the end of this school year and will participate in a three-day long mediation training in September of 2023.

Overall, the school continues to communicate with teachers, parents, and students to gain a perspective on what behavioral trends exist on and off campus. The school takes a proactive role in addressing all issues reported. The school continues to address situations with the students and parents/guardians on a case-by-case basis. Our core values serve as a constant focal point during all discussions resulting from disciplinary action. To promote our school culture of integrity, excellence, and community, AMSA uses a “progressive” disciplinary system that steers away from zero tolerance policies, which result in automatic suspensions. In non-flagrant cases of disrespect or poor behavior, instead of punishing a student through detentions or suspensions, AMSA prefers to task students with reflective assignments directly related to their behavior, such as writing a research paper on substance abuse, gender discrimination, or bullying. AMSA focuses on educating the student during the disciplinary process, which allows the student to learn from the experience, to understand its consequence and modify their behavior to make better choices.

The Administration has purchased Panorama, a tool to explore a variety of student data points. The data available includes comprehensive information such as attendance, grades, discipline action, IEP, 504, ELL, or economically disadvantaged status. The vice principal and both deans met with the upper and lower school counselors every week to check in on students, making it possible to flag behavior trends early. The goal is to keep track of all students, not just the students with obvious behavioral issues. The deans work to be proactive with students, rather than waiting to address a behavioral incident.

Responsible for student affairs and discipline, the deans worked closely with the school counselors to provide a consistent message to our students regarding behavior and civic mindedness. The deans held assemblies with students at separate grade level meetings this year, allowing for targeted and age-appropriate topics and conversations. Topics for the younger students included bullying and harassment, vandalism, discrimination, respecting self, and others. The older students were provided with information on vaping, drug and alcohol usage, plagiarism, and academic dishonesty. The deans focused on regular communication and follow-up with students to promote and encourage relationships that develop healthy and caring individuals.

The Director of School Counseling was involved in administering two DESE Grants: FC 598 MyCAP and FC 613/332 SEL and Mental Health Grant. Through FC 613/332, AMSA has added administrative support to the counseling department, an academic success coach to the ELL department, and continued work with Care Solace (a mental health care coordination service). The school completed its third year working with Wayside Youth and Family Services, which provided a clinician on-site at AMSA two days a week.

CRITERION 4: DISSEMINATION

AMSA is committed to robust community outreach and dissemination efforts, that continue to provide opportunities for our students and staff to share and exchange instructional practices and innovative curriculum with other Massachusetts schools. AMSA's outreach is not limited to the classroom. Our students and staff are equally interested in building strong citizenship and community mindedness through service to local residents and assistance programs. AMSA's Leaders of Tomorrow actively participate in soup kitchens, "sweats for vets", clothing drives, and clean-up events at parks and senior centers.

The Marlborough STEM Council created a program called the M-20 Summit. In this program, students from all four Marlborough schools (Advanced Math and Science Academy Charter School, Marlborough High School, Assabet Regional Technical High School, and New England Innovation Academy) work with corporate volunteers to present a series of recommendations to solve local or global concerns. This year they addressed solving pollution problems in three local rivers.

In collaboration with the Marlborough Regional Chamber of Commerce, AMSA created a career expo that focused on five different industry sectors: Life Science/Manufacturing, Hospitality, Finance, Healthcare, and Municipalities. 170 high school juniors and seniors from AMSA, Marlborough High, Assabet Regional Technical High School, Algonquin High School, Westborough High School, and Hudson High School participated in workshops that explored careers in these five sectors, appealing to students who may be interested in a working internship or joining the workforce as an alternative to entering a 4-year college program.

Years in the making, AMSA initiated a Collaborative Internship Program with Lesley University. Our first group of Lesley students signed on for a one-year Intensive Program to earn a master's degree and Massachusetts Initial Licensure. They started in August 2022. The program provides hands-on classroom experience, Math and Computer Science curriculum, mentorship, and professional development opportunities (www.amsacs.org/community/lesley-internship-program). The program is led by AMSA's Math Department Chair and Computer Science and Engineering Department Chair, along with several Math and Computer Science Teachers. Three Lesley interns joined AMSA for the program for the 2022-2023 school year. At the end of the year, these interns had a full year of classroom experience, curriculum knowledge, and professional development training. They passed the MTEL exams and two of the candidates acquired jobs. One joined the Concord district as a Computer Science teacher and the other joined AMSA's faculty to teach Computer Science in grades 6 and 9.

Additional dissemination efforts that involved sharing AMSA's best practices and resources with other public and public charter school districts, students, and educators are provided on page 6.

Dissemination Efforts 2022-2023

Best Practice Shared	Vehicle for Dissemination	Who at the school was involved with the dissemination efforts?	With whom did the school disseminate its best practices?	Result of dissemination
Mediation Program	Onsite visit with school personnel, and providing information through a Q & A.	AMSA's Lower School Dean of Students and Upper School Dean of Students	Northborough Public Schools, the McAuliffe Charter School, Wayland Middle and High School, Natick Middle and High School, and Dover Sherborn district.	Sharing and explaining the details of AMSA's successful and ongoing mediation program: the partnership with Metro West Mediation and the process that was used to implement and operate the mediation program at AMSA.
Administrative policies and resources related to employee relations, hiring practices, and employee benefits.	Onsite visit with administrators.	AMSA's Executive Director and Assistant Executive Director	Foxborough Regional Charter School	Shared successful administrative policies, resources, and guidance.
Computer Science Curriculum	Panel discussion	AMSA's Math and English Language Arts Department Chairs	MCPSA Fall Conference	Department leaders sat on panel to share information about how AMSA prepares students for MCAS.
Tier 2 Group Counseling	Presentation "Building Capacity for High School Tier 2 Group Counseling"	AMSA's Director of School Counseling and a High School Counselor	Attendees at the Massachusetts School Counseling Association Annual Conference.	Their presentation "Building Capacity for High School Tier 2 Group Counseling" was delivered live at the Massachusetts School Counseling Association Annual Conference and recorded for virtual conference attendees.

ACADEMIC PROGRAM SUCCESS

CRITERION 5: STUDENT PERFORMANCE

The following link provides the most recent (2022), publicly available student performance data in AMSA's School Report Card. [AMSA-Charter-Public-School-Report-Card-Overview-2022](#)

Due to the COVID-19 pandemic, most districts and schools did not receive an accountability determination in 2022.

See Appendix A Accountability Plan Evidence 2022-2023 on pages 16-17 to see how AMSA has demonstrated progress in academic achievement during the 2022-2023 school year as measured by non-statewide assessments.

The English department continues to innovate to mitigate the effects of the pandemic on learning and to help all learners access the curriculum. Technological skills and practices learned during Covid continue to support our teachers' effectiveness and have become an integral part of all classrooms, including Google docs, voice and video comments, and video conferencing. To address both the academic and social-emotional needs of our students, the English department continued this year to develop and implement a mentoring program (piloted last year) which reinforces curriculum, encourages social-emotional development, and offers opportunities to practice these skills. Students in grades 10-12 act as role models and mentors for new 6th grade students with whom they are paired. In monthly meetings, the paired "buddies" engage in shared English activities designed to reinforce skills development and to develop social/emotional skills appropriate. For example, students work together to create a "product pitch" or "dream job description" and then practice their presentation and interview skills. Throughout the programs, mentors have opportunities to develop leadership and problem-solving skills and their 6th grade "buddies" have opportunities to learn from an older role model. Participants report greater feelings of inclusion and connection to the larger school community.

The English department continues to review and revise major assessments to respond to learning gaps and needs at every level. In response to this ongoing review, our upper school students will receive both direct group instruction (in addition to the usual targeted, individualized feedback) in grammar and mechanics in the following key areas: sentence completeness, sentence variety, effective paragraphing, comma usage, parallel structure, correct modification, correct agreement. In the past, these skills did not require explicit, whole-group instruction, but as students' needs change, the addition of this kind of instruction will be helpful to many. Next year, our whole group instruction in 6th grade will be revised to better serve the wide variety of skills our 6th grade students bring to AMSA. The new "workshop" model will be delivered during the extra English session which our 6th grade English students participate in every other day. It will incorporate a modified UDL approach which will address both reading and writing skills and which will allow students and teachers to meet different student needs more effectively through a variety of activities and workstations which students may choose or be assigned to.

The Math department uses midyear exam results and final exam results to analyze gaps in students' knowledge. The 2022-2023 results showed that in grades 8 through 12, "covid learning gaps" have been narrowed and the majority of students gained expected confidence and knowledge with averages in the range of 70-85 across all levels.

This is not the case with our younger students in grades 6 and 7, where we still see lower than pre-covid

averages, especially in groups of struggling students. For example, 6th grade students who are considered “struggling”, scored a raw average result of 62 on the 2023 mid-year exam and 7th grade students who are considered “struggling”, scored a raw average result of 64 on the 2023 mid-year exam, versus the results on the mid-year exam in 2020, where raw average results in these groups were in the range of 68-80.

Although our students continued to score higher on the PSAT exams than the state averages, we saw a comparable drop in achievement in both AMSA’s PSAT scores and the state’s PSAT scores following the pandemic. See the chart below that compares the (pre-pandemic) Fall 2019 PSAT scores with the 2022 PSAT scores.

PSAT SCORE COMPARISON – FALL 2019 AND FALL 2022

	2019	2019	2022	2022
Grade	School Mean	State Mean	School Mean	State Mean
11th	1212	1014	1118	992
10th	1160	948	1070	928

To address learning gaps and provide additional support for students who needed more individualized work, the Department Chairs developed a recovery plan that focused on study skills and executive function skills. The Math Department expanded their support program, and teachers in general put a greater emphasis on reading, writing, and comprehension skills.

The AMSA community is very proud of its commitment to providing students with broad access to Advanced Placement (AP) courses. AMSA offered 18 different AP exams in 2023 to students in grades 10, 11, and 12. As shown in the chart below, 84% of our students’ AP exams had scores of 3 or higher, demonstrating our dedication to excellence shared by our students and teachers, despite the disruption from the COVID-19 pandemic. Our students continue to participate with enthusiasm and perform at a high level of achievement.

COLLEGE BOARD REPORT AMSA

	2021	2022	2023
Number of AP Exams	505	413	390
% of AP Exams with Scores of 3 or Higher	88%	89%	84%

CRITERION 6: PROGRAM DELIVERY

AMSA continues to deliver a highly structured academic program that consists of continuous, logically organized, and interconnected multi-year courses. Our goal is to meet the needs of all students. The foundation of AMSA’s educational model is the belief that all children can learn complex, abstract concepts at an early age if allowed to build on these concepts as they mature and allowed to make mistakes. Understanding grows from exposure to ideas and concepts developed over time. AMSA students are encouraged to embrace challenges, pursue intellectual advancement, and develop valuable collaborative skills. Students are taught that advancement in academic knowledge is a process that requires time, commitment, and discipline, but most importantly, a passion for learning.

The AMSA English program includes seven years of continuous, scaffolded writing practice. Grammar, mechanics, usage, and vocabulary are taught directly in grades 6, 7, and 8, and targeted instruction in

problem areas of writing continues in grades 9-12. At all grade levels, AMSA's writing curriculum develops writers by doing. All students work toward mastery of the techniques of effective writing by producing meaningful and effective prose in a variety of modes and by editing and revising their own and peers' work, preparing them for writing in college, work, and civic society. Literature study at AMSA is historically and thematically aligned with an emphasis on foundational works of literature confronting the essential questions of human existence from a variety of perspectives and traditions. Students' study of literature has a two-fold goal: to produce critical thinkers who have a clear and informed understanding of the literary canon and who have mastered the skills and concepts necessary to interpret, appreciate, and apply the knowledge gained from a wide range of literary works and voices from both the past and present. General alignment with AMSA's history curriculum helps students understand the context necessary to achieve the rigorous levels of critical analysis for which AMSA strives. Our goal is to produce critical readers who can ask incisive critical questions and find answers which undergird a deep understanding of any text.

AMSA history classes are taught in chronological order. In grades 6 and 7, students study ancient and classical history as well as the history of the Middle Ages. In grade 8, students study the history of the modern world, starting in the 1400s to the French Revolution of 1789. In grade 9 students study the history of the modern world from the French Revolution to today. In grades 10 and 11 students study American history. Students learn about the culture of the indigenous people who existed in America before the arrival of Europeans, and the growth of the various colonies in North America, including the rise of slavery, the American Revolution, the Constitution, the Civil War and Reconstruction. Students also study all the major events of modern America, including the Industrial Revolution, the World Wars, the many rights-based movements (such as the Civil Rights Movement, the Feminist Movement, and the LGBTQ movement) that emerged in the 1950s and 1960s. The curriculum also examines how the American economy has changed over the past several decades. To teach our history curriculum, AMSA teachers employ a variety of methods (with a mix of discussion, group work, project work, lecture, and discussion). AMSA history teachers also use a variety of technologies. The goals of our history curriculum are to promote a lifelong love of history, develop critical thinking and writing skills, and foster an understanding of the diverse world we live in. In recent years we have increased our focus on Asian, African, and Latin American history as well as the history of nativism and racism in the United States, and the knowledge and habits of good citizenship.

The World Language and Art Program offers a rigorous program with the AP level in all subjects including Art, French, Latin, and Spanish. The department implements interdisciplinary study between World Language and Art, and other disciplines, so students can make connections and comparisons across various subjects, synthesize concepts, and engage in critical thinking and analysis. For the second consecutive year, we have held Arts and Science night in May as a way to celebrate our multi-faceted and talented students. This event includes an extensive visual artwork display, student presentations of science projects and performances by chorus, band and a cappella.

AMSA has also successfully offered the Massachusetts Biliteracy State Seal for the fourth year. This initiative recognizes students who demonstrate proficiency in English and another language. This year's 2023 AMSA graduates earned the Seal in Latin, Portuguese, and Spanish. The department is also proud to offer national honor societies in Art and Spanish to qualifying students.

The AMSA Math program introduces students to concepts of Algebra and Geometry in grade 6 and grade 7. Geometry is taught in parallel to Algebra in grade 7 through 10 to build connection between subjects. There is progression of courses from grade 6 through 12. All students are introduced to ideas

of polynomial functions, trigonometry, conic sections, logarithms, exponent, probability, and statistics. 85% of students are introduced to concepts of Calculus. Students are given knowledge of Calculus (including Multivariable Calculus) and Linear Algebra before or in parallel of studying advanced Physics, Chemistry and Statistics. Seniors are offered “Life Courses” that include Statistics and Accounting. Special lessons for advanced students are offered once a week that focus on non-standard problems, such as graph theory, game theory, number theory, and advanced combinatorics and probability.

AMSA implemented a Middle School Math Internship Program, offering credit to student interns who assist students during Directed Study by reviewing material covered in class, helping students prepare for quiz retakes by reviewing previous quizzes and managing the Skills Quiz retake process.

AMSA’s Middle School Science program is unique. Over the course of three years, AMSA middle school students will cover a high school biology course. This allows teachers to reinforce ideas throughout the material, helping to draw connections relevant to students and the world they live in today. In grade 7, students’ studies include discrete Chemistry and Physics Classes, and in grade 8, additional Earth Science classes are added to the fold. AMSA’s multi-year foundation prepares students for their high school Biology course. After successful completion of their freshmen year, students can choose a path in Chemistry and additionally choose to either enter AP Biology or have early access to one of our many scientific research programs. Once students have entered into the Research Program, they have the opportunity to stay with that program for up to three years. Juniors are provided with options in addition to Physics, from Sustainability, access to the Research Program, AP Chemistry, and Discovery New England. Seniors have access to all the junior elective options, plus Anatomy and Physiology, Meteorology, and finally the opportunity to take AP Physics.

Some of the most notable advancements to our science curriculum in recent years are the dynamic research and internship opportunities offered in collaboration with ThermoFisher Scientific, Boston Scientific, Sunovion, Quest Diagnostics, Raytheon, GE Health, and ViaSat. Students participate in scientific research modeled after graduate school science programs. Current areas of research include Engineering, Astronomy, Geochemistry & Hydrology, Molecular Biology, and Field Studies.

AMSA’s Computer Science and Engineering program is very special as it integrates our Science and Math curriculum into its program for all grade levels. All students take Computer Science in grades 6 through 11. The curriculum focuses heavily on solving problems using tools that help students visualize and get feedback from their computation. The curriculum focuses on projects that not only reinforce the Math, Science, and other content areas, but also emphasizes the importance of foundational knowledge of STEM fields to show the real-world relevance to our students. AMSA’s Computer Science curriculum focuses not only on core concepts and programming structures but also on creativity, flexibility, and critical thinking. AMSA offers many accelerated courses such as AP Computer Science, Intro to Data Sciences, Intro to Cyber Security and Cryptography, Discrete Mathematics that teaches foundational mathematics and logic, Networks and Full stack development which is the core of Computer Science. When a high school student completes our program, they will be well prepared to seek a Computer Science, Math, Science and/or Engineering degree, have advanced knowledge and abilities in computing, be able to engage in solving problems with success, push the boundaries of conventional thinking, complete interdisciplinary projects, and explore internship/research opportunities with skill and confidence. AMSA seeks to build collaborative relationships with industry and universities to expose our students to practical applications of Computing and Engineering. AMSA is proud of its early foresight to keep CS in the core curriculum, and we are willing to work with other schools and businesses to make its program’s model of Computer Science a core requirement, the exemplar for all others.

The Computer Science Department offered a project based artificial intelligence enrichment program at AMSA from July 10-21, 2023, through **Inspirit AI**. AMSA students from grades 8-12 were exposed to the fundamental concepts of AI and gained a deeper understanding of how AI is used to build ChatGPT and generative AI, fight the COVID-19 pandemic, power self-driving cars, and more. Students were shown how to program AI using Python, discuss ethics and bias within AI, and participated in a group project applying AI to a discipline like healthcare, astronomy, finance, among others. No prior computer science experience was required to participate. Students were given access to an online portal for continuous learning after the program ended. Students were able to attend workshops designed to prepare them for leading computer science and AI programs internationally.

The Cummings Foundation awarded AMSA \$100,000 over the next three years to fund an initiative AMSA created to broaden participation in engineering from underrepresented groups. Last year, we piloted the program with our collaborator, the University of Massachusetts Lowell (UML). This year, we will serve 30-50 students from primarily underrepresented backgrounds. Underrepresented students in engineering include students who identify as women, first-generation college students, and as Underrepresented Minority (URM) students. In our program, rising ninth and twelfth graders will be put into teams to develop a prosthetics prototype. Undergraduate students will facilitate their design process in collaboration with UML and AMSA staff. Professors across the different fields of engineering at UML will also give seminars and run activities. The hope is to help students develop their STEM identity and identify in-group STEM role models, while engaging in hands-on engineering activities and learning about potential engineering careers. AMSA will host a two-week engineering design camp, in addition to on-campus recruitment events for STEM careers at UML and UMass Amherst.

AMSA is very proud of its vigorous wellness and physical education curriculum. Our wellness and physical education teachers are highly qualified professionals who work with a diverse student body. The curriculum provides activities and learning opportunities that encourage healthy habits and lifelong fitness. Students in grades 8 and 10 receive a health curriculum in conjunction with their physical education. The curriculum is designed to familiarize students with issues that are commonly experienced in middle and high school. Lessons have been carefully developed to provide a strong knowledge base and offer experiences that enable students to make good choices and decisions. The goal is to build a foundation of self-awareness, empathy, and understanding, that promotes the development of physically, socially, and emotionally healthy students.

ORGANIZATION VIABILITY

CRITERION 10: FINANCE

The following documents are available on the next four pages:

- Unaudited FY23 Income Statement, page 12
- Balance Sheet FY23, page 13
- Approved School Budget FY24, page 14
- FY24 Enrollment Table, page 15
- Capital Plan for FY24, pages 15-16

Advanced Math and Science Academy Charter School
Income Statement
For Fiscal Year Ending June 30, 2023
Preliminary and Unaudited

	<u>July 2022 - June 2023</u>
Income	
Tuition	15,756,464
Grants & Donations	564,362
Miscellaneous Income	228,555
Nutrition Income	109,987
Rental Income	251,893
Student Program Income	242,286
Athletic Program Income	184,541
Transportation, Includes In Kind	570,821
In-Kind MTRS (estimated)	1,600,000
Total Income	<u>19,508,909</u>
Gross Profit	19,508,909
Expense	
Salaries	9,959,754
Payroll Taxes & Fringe Benefits	1,856,670
Professional Development	79,580
Instructional Supplies & Equip	395,036
Student Program Expense	214,184
Nutrition Expense	132,308
Athletic Expense	619,222
Student Transportation Expense	729,487
Mortgage Interest	400,877
Facilities	471,121
Utility	255,884
IT	358,782
Auditor	33,400
Legal Expense	22,954
Other Operating Costs	411,293
Interest Expense on Leased Assets	11,406
Amortization of Leased Assets	125,072
Depreciation Expense	878,213
MTRS Expense (estimated)	1,600,000
Total Expense	<u>18,555,243</u>
Net Income	<u><u>953,666</u></u>

Advanced Math and Science Academy Charter School
Balance Sheet
As of June 30, 2023
Preliminary and Unaudited

	<u>June 30, 2023</u>
ASSETS	
Current Assets	
Checking/Savings	8,420,623
Accounts Receivable	1,275,124
Other Current Assets	<u>512,034</u>
Total Current Assets	10,207,781
Fixed Assets, Net of Accumulated Depreciation	19,041,306
Other Assets	<u>999,440</u>
TOTAL ASSETS	<u>30,248,527</u>
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	45,790
Other Current Liabilities	<u>1,936,290</u>
Total Current Liabilities	<u>1,982,080</u>
Long Term Liabilities	
Mortgage Payable	11,945,204
Deferred Cash Inflow Leased Assets	<u>1,266,873</u>
Total Long-Term Liabilities	<u>13,212,077</u>
Total Liabilities	<u>15,194,157</u>
Equity	<u>15,054,370</u>
TOTAL LIABILITIES & EQUITY	<u>30,248,527</u>

**Advanced Math and Science Academy Charter School
Budget for Fiscal Year Ending June 30, 2024**

Approved by the AMSA Board of Trustees on May 4, 2023

	July 2023-June 2024
Income	
Tuition	\$ 16,111,000
Rental Income	\$ 240,000
Grants & Donations	\$ 461,000
Miscellaneous Income	\$ 162,000
Nutrition Income	\$ 138,000
Student Program Income	\$ 283,000
Athletic Program Income	\$ 204,000
Student Transportation Income	\$ 178,000
Total Income	\$ 17,777,000
Gross Profit	\$ 17,777,000
Expense	
Salaries - Collective Bargaining Unit	\$ 5,973,000
Salaries - Non Collective Bargaining Unit	\$ 4,318,000
Payroll Taxes & Fringe Benefits	\$ 1,885,000
Professional Development	\$ 151,000
Instructional Supplies & Equip	\$ 447,000
Student Program Expense	\$ 288,000
Nutrition Expense	\$ 129,000
Athletic Expense	\$ 598,000
Student Transportation Expense	\$ 366,000
Mortgage Interest	\$ 680,000
Facilities	\$ 495,000
Utility	\$ 245,000
Non Instructional Supplies	\$ 63,000
Advertising and Marketing	\$ 18,000
Insurance	\$ 176,000
IT	\$ 294,000
Auditor	\$ 35,000
Legal Expense	\$ 20,000
Other Operating Costs	\$ 293,000
Depreciation Expense	\$ 993,000
Total Expense	\$ 17,467,000
Net Income	\$ 310,000

Information From the Budget Submission and Spring 2023 Pre-enrollment Process

FY24 Enrollment Table	Enter Number Below
Number of students pre-enrolled via March 15, 2023, submission	966
Number of students upon which FY24 budget tuition line is based	966
Number of expected students for FY24 first day of school	966
Please explain any variances: <i>Potential variances managed through backfilling and/or enrolling students from the waitlist.</i>	

CAPITAL PLAN FY24 (Ongoing and Projected)

Description of Project	Current Status	Completion	Estimate
Information Technology Fixed Assets:			
Acronis Backup and Malware Scanning	In Process	Sep-23	44,000
Staff Laptops About one fourth of staff receive a new laptop. Laptops are on a four-year rotation.	In Process	Sep-23	33,272
Projector Upgrades Projector Upgrades to laser/wireless model with no bulb	In Process	Dec-23	32,000
Chromebook Carts and White Glove Service Purchase 5 new Chromebook carts	In Process	Sep-23	70,000
Computer Labs Upgrade for Engineering Curriculum	In Process	Sep-23	60,000
Hp Switch Upgrades and 33 Wireless Access Points	In Process	Sep-23	33,700
Network Management Services	In Process	Sep-23	4,200
Fortigate Firewall 600E	In Process	Sep-23	25,000
Total Information Technology Fixed Assets			302,172

Facilities Fixed Assets:			
Replace Flooring 201 Forest Street	In Process	Sep-23	80,000
Chiller Replacement	In Process	Sep-23	313,866
Rooftop Unit Replacement	In Process	Sep-23	54,891
Total Facility Capital Improvements			448,757

Total Fixed Assets	750,929
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APPENDIX A: ACCOUNTABILITY PLAN EVIDENCE 2022-2023

FAITHFULNESS TO THE CHARTER	2022-23 Performance M (Met) NM (Not Met)	Evidence (include detailed evidence with supporting data or examples)
Objective: AMSA will create an environment that celebrates knowledge and inspires an appreciation of learning.		
Measure: 95% of all AMSA students in grades 6 through 11 will participate in the annual American Mathematics Competitions (AMC). The 95% of AMSA students in grades 6 through 11 participating in the annual AMC will reflect the demographics of all students in grades 6 through 11. (<i>Participation in the AMC is optional for seniors.*</i>)	NM	58% of students in grades 6-11 participated in the AMC. 97% of students in grades 6-8 participated in the AMC 8. Due to Covid, participation by students in grades 9-11 was made optional and the rate for this group was reduced to 15.8%. <i>*It is noteworthy to report that 30% of our seniors opted to participate in the AMC.</i> The lower school data reflects AMSA's demographics in most student groups. However, the demographic data for the (15.8%) participants in grades 9 through 11 does not demonstrate demographic equity among the ELL and Students with Disabilities subgroups. <i>See Appendix E for supporting demographic data on page 32.</i>
Measure: By the end of the charter term, 65% of all AMSA students will participate in an academic interest club, Student Government, Student Council, a National Honor Society, Student Mentor Program, Student Mediation Program, and/or competitive academic activity during or outside their regular school day. The 65% of all AMSA students participating in academic interest clubs and activities will reflect the demographics of all AMSA students.	M	737 (77%) students participated in academic clubs and/or interest groups during the 2022-2023 school year. Data closely reflects AMSA's demographics for most student groups. <i>See Appendix E for supporting demographic data on page 32.</i>

Objective: AMSA's educational model will prepare students for college and professional life.		
Measure: Each year, 85% of all AMSA students will take at least one Advanced Placement course during their High School career.	NM	82% of the students in the class of 2023 took at least one Advanced Placement course between grades 9 and 12.
Measure: Each school year, the number of Advanced Placement exams taken by AMSA students earning at least a score of "3" will exceed the state average by 15% and the national average by 20%.	NM	AMSA administered 390 AP exams, with 84% exams with a score of 3 or higher. Comparing the same AP exams to state scores of 3 or higher, the state percentage is 70% and the national percentage is 66%. AMSA exceeded the state percentage by 14% and the national average by 18%.

Faithfulness to Charter	2022-23 Performance (Met/Not Met)	Evidence (include detailed evidence with supporting data or examples)
Measure: By the end of the charter term, the School Counseling Department will have integrated into the curriculum, seminars for all high school students, that provide grade appropriate college admissions preparation, essay writing, and financial aid guidance, with a strong focus on mental health and wellness.	M	AMSA School Counselors taught a fall senior seminar and a spring junior seminar online for all students providing them with college admissions preparation, essay writing, and financial aid guidance, with a strong focus on mental health and wellness. AMSA was awarded a MyCAP grant and has been working to finalize a 9th grade and 10th grade seminar with our Health and Physical Education Department for implementation in the 23-23 school year.

Measure: Each year, 98% of seniors will apply to a college or university and 100% of seniors who apply to a college or university will be accepted.	NM	97% of the students in the class of 2023 applied to a college or university. Of these students, 100% were accepted to a college or university.
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Objective: AMSA will challenge all students at the maximum of their ability and current intellectual preparedness with the goal of further advancing their “maximum” level.		
Measure: 100% of AMSA students in grade 6 (Class of 2027) and grade 7 (Class of 2026) who are identified as Lowest Performing based on their Next Generation MCAS scores in Math and ELA will advance to the level of Next Generation Passing or higher by the time they complete grade 10.	N/A	The cancellation of the 2020 MCAS administration and the significantly reduced participation during the 2021 MCAS, left us without a true baseline on which to assess this measure. Participation in 2022 was back to “normal” and will serve as the baseline to track progress in 2023.
Measure: 100% of AMSA students in grade 8 (Class of 2025, Class of 2026, and Class of 2027) who are identified as Lowest Performing based on their Next Generation MCAS scores in Science, Technology, and Engineering will advance to the level of Next Generation Passing or higher by the time they complete grade 10.	N/A	The cancellation of the 2020 MCAS administration and the significantly reduced participation during the 2021 MCAS, left us without a true baseline on which to assess our charter term progress. Participation in 2022 was back to “normal” and will serve as the baseline to track progress in 2023.

Measure: By the end of the charter term, 20% of students in grades 10, 11, and 12 will be enrolled and actively participating in AMSA's Science Research and/or Internship Program. The 20% of students will reflect the demographics of all students.	M	98 students (25%) out of the 397 students in grades 10, 11, and 12 enrolled and actively participated in AMSA's 2022-2023 Science Research Programs and/or Internship Program. Data closely reflects AMSA's demographics for most student groups. <i>See Appendix E for supporting demographic data on page 32.</i>
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DISSEMINATION	2022-23 Performance (Met/Not Met)	Evidence (include detailed evidence with supporting data or examples)
Objective: AMSA will share its curriculum with other Massachusetts public schools and public charter schools over the course of the charter term.		
Measure: Each year of the charter term, AMSA will participate in at least two educational exchange activities with the Massachusetts Charter Public School Association and their Northeast and Central Region affiliate.	M	The Executive Director actively participated in the Leadership Program through MCPSA that provided opportunities for valuable exchanges of administrative knowledge, and best practices. The Program included the ED Networking Group-monthly meetings/ongoing, the ED Northeast and Central Regional Alliance-monthly, and the MCPSA bi-annual Delegate-fall/spring. AMSA's Math and English Department Chairs sat on a discussion panel at the 2022 Fall Delegate meeting to share strategies regarding how AMSA prepares students for MCAS.

Measure: AMSA is an active member of the Marlborough STEM Council, a collaborative educational initiative with Marlborough High School and the Assabet Valley Regional Technical High School. The goal is to encourage students to be “professional learners” within their community. Each school year, AMSA student members “adopt” a local elementary school, share curriculum, and personally deliver instruction. By the end of the charter term, AMSA will establish similar collaborative initiatives with our other three core towns, Maynard, Hudson, and Clinton.	NM	AMSA sophomores and juniors collaborated with students from Marlborough High, Assabet Valley Regional Technical School, and New England Innovation Academy again this year. Each high school “adopted” an elementary school in Marlborough and participated in a program called <i>STEM in the Classroom</i>. The high school students taught Chemistry and Physics to all the 4th graders in Marlborough (510 students). <i>Involving the other core towns in this program is an ongoing initiative.</i>
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APPENDIX B: RECRUITMENT AND RETENTION PLAN 2023-2024

2022-23 Implementation Summary:

AMSA's website is continuously in the process of updating and improving. The content available is rich with information about the academic program, support services for Special Education and ELL students, athletics, events, club activities, competitions, videos, student led outreach, Board of Trustees, and featured personnel and student highlights.

AMSA held three virtual information meetings on December 8 and on January 12 and 26. Postcards with school information including an invitation to the virtual information sessions were sent to families with fifth grade students in the Marlborough public elementary schools. Also, post cards were sent to students in the 5-12 years of age demographic who are residents of Clinton, Hudson, and Maynard. The Principal, Registrar, Special Education Director, ELL Director, and Communications Manager attended these meetings. Our Special Education Director remained online after the meeting to answer questions. As advertised, the January 12 meeting featured live Portuguese and Spanish translators. A recording with highlights from each meeting, offering live translations in Portuguese and Spanish, and subtitles in multiple language options, is available on the school website. However, word of mouth has proven to be the best marketing tool. Applications did increase again this year. AMSA received 1,070 applications for the 2023-2024 school year.

AMSA held four in person, student led, school tours in the fall and three in the spring that were open to the public. School tours were publicized through social media (Facebook and Instagram). All new students who were accepted through the lottery, and their families, were invited to attend the tours.

Subgroup enrollment is historically impacted by the large number of siblings who are enrolled each year. Out of the 165 seats available for the 2023-2024 school year, 68 will be filled by siblings on the first day of school. Due to the nature of a lottery system, and having only 145 seats available to non-siblings, it is difficult to manage sub-group numbers. AMSA was able to enroll Marlborough residents again this year, which decreased the number of seats available to the other core town applicants.

It seems unlikely that the October 1, 2023, SIMS will meet the comparison index or the school's gap narrowing targets. We would be open to further discussion with the Department regarding the school's Recruitment Plan once we have submitted the October 1, 2023, SIMS.

We would also be open to further discussion with the Department regarding the school's rates of enrolling students with disabilities or English learners (EL) compared to the Comparison Index or gap narrowing targets.

Describe the school's general recruitment activities, i.e. those intended to reach all students.

General Recruitment Activities for 2023-24:

Activity 1: Postcards with the Virtual Recruitment Meeting Information (in three languages) will be sent to Marlborough families who have 5th graders in the Marlborough public schools. In addition, we plan to mail postcards to all families in Hudson, Maynard, and Clinton who have children between the ages of 7 and 10 who are attending core town public schools.

Activity 2: We plan to hold three virtual information meetings for all interested families in December 2023 and January 2024. We plan to invite families from all four core towns. One meeting will feature live translations in Portuguese and Spanish. Highlights from all three meetings will be posted on the AMSA website with closed caption translations available in multiple languages.

Activity 3: The PTO officers will attend virtual meetings to address parent involvement, community awareness, and uniform sales.

Activity 4: AMSA Public events inspire families and students to consider AMSA as a unique educational community. Events open to the public include the International Festival, Spring Arts and Science Night, Drama Society productions, and the Annual Golf Tournament.

Activity 5: The Principal will continue to hold virtual Family forums. These meetings provide opportunities for AMSA parents to invite interested friends or neighbors to attend. All meetings are recorded and made available on the AMSA website with subtitles in multiple language options.

Activity 6: AMSA's Community Outreach Manager supervises AMSA's student group *Leaders of Tomorrow*, who continue to participate in many volunteer activities throughout the year, Marlborough and Clinton soup kitchens, and Sweats for Vets. AMSA's Community Outreach Manager represents our school and serves as an effective spokesperson for all charter schools. He is a member of the Board of Trustees Development Committee, sits on the Board of Directors of the Marlborough Regional Chamber of Commerce, and is currently serving on the Rotary Club of Marlborough. He is soon to be a Marlborough Councilman.

Activity 7. AMSA sophomores and juniors collaborate with students from Marlborough High, Assabet Valley Regional Technical School, and New England Innovation Academy. Each high school "adopts" an elementary school in Marlborough and participates in a STEM in the Classroom program. The high school students teach Chemistry and Physics to all the 4th graders in Marlborough (over 500 students).

Recruitment Plan – 2023-24 Strategies List strategies for recruitment activities for <u>each</u> demographic group.	
Special education students/students with disabilities	
(a) CHART data School percentage: 6.8% GNT percentage: 13.1% CI percentage: 13.1% The school is <u>below</u> GNT percentages and <u>below</u> CI percentages	(b) Continued 2022-23 Strategies • The disruption of the pandemic has stalled efforts to successfully engage a functioning SEPAC. The goal this year is to recruit a new SEPAC President and recruit interested and enthusiastic parents who will work closely with the school and the Director of Special Education to develop programs and events that will showcase AMSA's special education services and qualified staff. We will assess progress after one year. • The AMSA website will focus on building SEPAC visibility.
	(c) 2023-24 Additional Strategies • The Director of Special Education will reach out to the Clinton, Maynard, and Hudson SEPAC organizations with the hope of initiating a partnership with one or more of our core towns, since many of our students are residents. • Hire an additional full-time Special Education Teacher.
Limited English-proficient students/English learners	
(a) CHART data School percentage: 1.4% GNT percentage: 10.8% CI percentage: 10.8% The school is <u>below</u> GNT percentages and <u>below</u> CI percentages	(b) Continued 2022-23 Strategies • AMSA hired a full time Academic Success Coach who will support our ELL population and report to the ELL Director. • Live translators (Spanish and Portuguese) will attend at least one virtual Recruiting Information event. Will assess strategy in one year. • Virtual meetings will be recorded and translated on the website.
	(c) 2023-24 Additional Strategies • Hire a new full-time ELL Director/ELL Teacher • All admissions documents are available in English, Portuguese, and Spanish. • Portuguese and Spanish translators attend all virtual information meetings.

Students eligible for free or reduced lunch (Low Income/Economically Disadvantaged)	
(a) CHART data School percentage: 16.0% GNT percentage: 28.1% CI percentage: 39.1% The school is <u>below</u> GNT percentages and <u>below</u> CI percentages	(b) Continued 2022-23 Strategies • The PTO will resume their used uniform sales. • AMSA will target families with 5th graders in core town public schools and invite them to attend meetings that will include information about AMSA's robust financial assistance policy. • AMSA will increase the uniform assistance for eligible students. • AMSA will continue the Holiday Gift Card program, providing families in need with additional financial support. We will assess the effectiveness of these strategies within one year.
	(c) 2023-24 Additional Strategies • AMSA increased the uniform assistance from \$150 to \$200 per student registered in AMSA's free and reduced lunch program. • AMSA mentions the financial assistance program in our recruitment literature, during virtual information meetings, and school tours.
<u>Students who are sub-proficient</u>	(d) Continued 2022-23 Strategies • AMSA will target families with 5th graders in core town public schools, inviting them to attend meetings that will include information about AMSA robust peer mentoring and relatable student success stories. We will assess this strategy in one year. • AMSA will continue to run frequent videos describing school events and programs, including student mentor programs. • AMSA will continue to publish press releases that demonstrate our academic and athletic achievements, promoting that our success builds upon the effort and dedication of our students who have diverse backgrounds and abilities. We will assess the effectiveness of this strategy within one year.
<u>Students at risk of dropping out of school</u>	• AMSA does not accept applications past grade nine.
<u>Students who have dropped out of school</u> *only schools serving students who are 16 and older	• AMSA does not accept applications past grade nine.

Retention Plan 2023-2024

Please provide a brief narrative report on the successes and challenges of implementing strategies from the 2022-23 Retention Plan.

2022-23 Implementation Summary:

One of the biggest challenges has been dealing with the long-lasting effects of remote education, and how it resulted in learning gaps and drastic behavior trends. With increased focus on AMSA's MTSS (Multi-Tiered System of Support) and SEL (social and emotional learning), AMSA has continued with the SEL screener, Tier 2 Cognitive Behavioral Therapy (CBT) Groups, and a Tier 1 Advisory program called TRAILS (Transforming Research into Action to Improve the Lives of Students).

Although we appreciate and value our character development curriculum developed for our advisory program, we wanted more explicit skill instruction for our students. To address the unprecedented trends we faced, we purchased the TRAILS SEL curriculum. The TRAILS program continued to offer social and emotional learning (SEL) curriculum for the classroom, and self-care programming for staff, to promote mental health and wellness and build resiliency among students and staff.

AMSA was one of the first Massachusetts charter schools to introduce a BRYT program. BRYT partnered with AMSA to provide the tools, framework, and ongoing counsel to structure, and launch our own bridge program. Services are designed for students who have experienced extended absences as a result of mental and/or emotional health challenges and require support as they reintegrate into their school routine. Services combine support (counseling, crisis intervention, referrals), academic support (partnership with teachers to develop an academic plan, help students manage schoolwork, and provide basic tutoring), family support, and care coordination with school staff and health providers.

The Director of School Counseling was involved in administering two DESE Grants: FC 598 MyCAP and FC 613/332 SEL and Mental Health Grant. Through FC 613/332, AMSA has added administrative support to the counseling department, an academic success coach to the ELL department, and continued work with Care Solace (a mental health care coordination service). The school completed its third year working with Wayside Youth and Family Services, which provided a clinician on-site at AMSA two days a week.

Another challenge has been a lack of interest in AMSA's SEPAC. When the SEPAC leader stepped down during COVID, the SEPAC membership dwindled. Multiple letters were sent to parents of students with disabilities attempting to reestablish AMSA's SEPAC. The Director of Special Education contacted the Marlborough Schools to inquire if we could join their organization and were told that they too, were having trouble with parent support and are without an operational SEPAC.

Overall Student Retention Goal	
Annual goal for student retention	96%

Retention Plan – 2023-24 Strategies List strategies for retention activities for <u>each</u> demographic group.	
Special education students/students with disabilities	
<u>(a) CHART data</u> School percentage: 10.2% Third Quartile: 11.4% The school's attrition rate is <u>below</u> third quartile percentages.	<u>(b) Continued 2022-23 Strategies</u> Below third quartile: no enhanced/additional strategies needed. The disruption of the pandemic has continued to stall efforts to successfully engage a functioning SEPAC. AMSA will continue to recruit interested and enthusiastic parents who would be able to work closely with the school and the Director of Special Education to develop programs and events that would assist our students with special needs and their families.
	<u>(c) 2023-2024 Additional Strategies</u> - The Director of Special Education will reach out to the Clinton, Maynard, and Hudson Special Education Directors with the hope of initiating a partnership with one or more of our core towns. - AMSA will hire an additional full-time special education teacher.
Limited English-proficient students/English learners	
<u>(a) CHART data</u> School percentage: 0.0% Third Quartile: 20.5% The school's attrition rate is <u>below</u> third quartile percentages.	<u>(b) Continued 2022-23 Strategies</u> Below third quartile: no enhanced/additional strategies needed. - A full-time ELL Teacher provides reading support to ELLstudents and is a certified WIDA Test Administrator. - A full-time Reading Specialist provides additional support. - AMSA's website has a translation function for most content. Through FC 613/332, AMSA has added administrative support to the counseling department, and an academic success coach to the ELL department.
	<u>(c) 2023-2024 Additional Strategies</u> Hire a new full-time ELL Director/ELL Teacher

Students eligible for free or reduced lunch (low income/economically disadvantaged)	
(a) CHART data School percentage: 1.6% Third Quartile: 13.3% The school's attrition rate is <u>below</u> third quartile percentages.	(b) Continued 2022-23 Strategies Below third quartile: no enhanced/additional strategies needed. • The PTO will continue to hold used uniform sales periodically to assist parents with uniform costs. • AMSA established a <i>Car-pool Bulletin Board</i> on the school's website, providing a forum for AMSA families who live outside of Marlborough to communicate with other AMSA families who are looking for less expensive transportation options. • AMSA has a financial assistance policy that clearly states and formalizes financial assistance to economically disadvantaged students for school expenses, such as uniform, transportation, meals, field trips, athletics, and clubs. We hope to see the data change within two years. • Parent volunteer translators to assist with used uniform sales.
	(c) 2023-2024 Additional Strategies Below third quartile: no enhanced/additional strategies needed. • The uniform assistance provided to families who are in our free or reduced lunch program will receive Lands' End gift cards to buy uniforms in the amount of \$200 per student, an increase of \$50. • AMSA will continue to provide eligible families with Holiday Gift Cards in December.
<u>Students who are sub-proficient</u>	(d) Continued 2022-23 Strategies • Through the FC336 Grant, AMSA revamped the Student Support Team process, started a Mental Health Committee that participated in DESE-sponsored professional development, mapped lessons for a new 9th and 10th grade seminar, and forged partnerships with Wayside Youth and Family Support Network, INTERFACE Referral Services, and Challenge Success. • AMSA holds an orientation program in August to assist new students with assimilation.

<u>Students at risk of dropping out of school</u>	(e) Continued 2022-23 Strategies • AMSA has established a working rapport with the Marlborough Police Department. AMSA will continue to collaborate with local law enforcement to educate our students about the dangers of engaging in harmful activity that can potentially contribute to challenges at school and the risk of dropping out. • AMSA continues to be a member of the Middlesex Partnership with Youth. Workshops offered include strategies to help eliminate risky behavior among students. • The School Counseling Department will continue to develop curriculum for advisory periods that promote social and emotional health. • The Deans and school counselors are continuing to develop the social and emotional curriculum for Lower School students delivered during their Directed Study period. The content addresses issues such as ethics training, character development, bullying, and suicide awareness. We will assess the effectiveness of this strategy at the end of each year. • AMSA continues to run an orientation for new students in August, to provide clear expectations and guidelines for student behavior in the high school, providing the critical attention and focus on social and emotional support. • AMSA continues to implement the SEL screener, Tier 2 Cognitive Behavioral Therapy (CBT) Groups, and a Tier 1 A program called TRAILS, and contracted with a new referral service (Care Solace). 2023-2024 Additional Strategies • Continue with AMSA's Bridge Program services designed for students who have experienced extended absences as a result of mental and/or emotional health challenges and require support as they reintegrate into their school routine.
<u>Students who have dropped out of school</u> <u>*only schools serving students who are 16 and Older</u>	(f) Continued 2022-23 Strategies • Students who leave school will be notified in writing annually of their options and available resources for completing high school.

APPENDIX C: SCHOOL AND STUDENT DATA TABLES

AMSA's student demographic information is located on the Department's website using the following links to our school's profile.

[Enrollment-Data-\(2022-2023\)-AMSA-Charter-School](#)

Student Data by Race/Ethnicity (2022-23)	
Race/Ethnicity	Percentage of Student Body
African American	2.8
Asian	11.9
Hispanic	8.5
Native American	0.0
White	69.3
Native Hawaiian, Pacific Islander	0.0
Multi-Race, Non-Hispanic	7.6

[Selected-Populations-Data-\(2022-2023\)-AMSA-Charter-School](#)

Selected Student Populations (2022-23)	
Title	Percentage of Student Body
First Language not English	23.6
English Language Learner	1.4
Low-income	16.0
Students with Disabilities	6.8
High Needs	26.0

Administrative Roster During the 2022-23 School Year			
Name	Title	Start Date	End Date
Ellen Linzey	Executive Director	7/2019	6/2023
Anders Lewis	Assistant Executive Director	7/2021	
Michael Nawrocki	Principal	3/2019	
Amanda Cence	Vice Principal	7/2021	
Daniel Amaral	Dean of Students	8/2017	
Anthony Montesion	Dean of Students	7/2019	
Lynn Jarvis	Director of Special Education	8/2019	
Kate Driver	Director of School Counseling	8/2017	
Kate Lee	ELL Director	8/2019	6/2023
Liana McLaren	Director of Finance and Operations	2/2026	
Virginia Burke	Human Resources Manager	3/2017	
Erica Piotrowski	IT Director	5/2017	
Joanne Doherty	Data Administrator	8/2018	
Sara Snow	Director of Accountability	1/2011	
Linda Edwards	Registrar	9/2017	
Sara Snow	MCAS District Coordinator	9/2008	
Eric Lane	Facilities Director	9/2011	
Michael Finkle	Communications Manager	11/2016	
Mark Vital	Community Outreach Manager	9/2011	
Marcy Eckel	Director of Development	10/2022	

We are sad to say farewell to our Executive Director Ellen Linzey, who retired in June. Assistant Executive Director Dr. Anders Lewis has stepped down from his leadership role and will be returning to his beloved History classroom, to the delight of his students. AMSA is grateful for their many years of exceptional leadership, navigating through the unprecedented COVID experience, and masterfully handling the challenges and long-lasting effects the disruption of the pandemic had on our students and staff. AMSA remains a strong school community due to their steadfast dedication, fortitude, and compassion. AMSA is in the process of welcoming a new Executive Director, Dr. Lisa C. Mobley. We look forward to introducing Dr. Mobley to AMSA as we continue in the pursuit of integrity, excellence, and community under her leadership.

Teacher and Staff Attrition for the 2022-23 School Year				
	Number as of the last day of the 2022-23 school year	Number of departures during the 2022-23 school year	Number of departures at the end of the school year	Reason(s) for Departure
Teachers	94	0	8	Layoff, Relocation, Resigned Personal, New Employment
Other Staff	56	3	4	Resigned Personal, Relocation, New Employment

Board Membership During the 2022-2023 School Year				
Name	Position on the Board	Committee affiliation(s)	Number of terms served on the board	Length of each term
Raul Porras	Chair	Executive, Governance	Second term	07/17 – 06/21 07/21 – 06/24
Dawn Capello (resigned 6/09/23)	Vice Chair	Executive, Finance	First term	07/21 – 06/24
Jill Schafer	Secretary	Executive, Governance	Second term	07/19 – 06/22 07/22 – 06/25
Roger Jarrett	Treasurer	Executive, Education and Finance Chair	Second term	07/17 – 06/21 07/21 – 06/24
Nick Poirier	Trustee	Finance	First term	08/19 – 06/23
Benjamin Hammel (term ended 3/08/23)	Trustee	Development	First term	09/19 – 06/23
Sheila Creaton Kelly	Trustee	Governance Chair	First term	09/19 – 06/23
Sowmini Sampath	Trustee	Governance	First term	07/20 – 06/24
Maura Webster	Trustee	Development Chair	First term	07/21 – 06/24
Bela Gorman	Trustee	Finance	First term	07/22 – 06/25
Zakery Prescott	Faculty Rep	Education	Second term	07/21 - 06/22 07/22 - 06/23
Laura Burgess	Parent Rep	Education	First term	07/22 - 06/23

Link to location of Board of Trustees and Committee Meeting Notices on the AMSA website:

[AMSA-Board-of-Trustees-and-Committee-Meeting-Notices](#)

APPENDIX D: ADDITIONAL REQUIRED INFORMATION

Facilities

The Advanced Math and Science Academy has not relocated to a new facility within the charter school's current charter term. The plan has been to purchase all three buildings on campus and renovate. The school purchased the building at 165 Forest Street on April 24, 2018, and the other two buildings on our campus, located at 199 and 201 Forest Street, on October 20, 2021. Unfortunately, the estimated cost of renovations has proven to be prohibitive, but constructing a new academic building was financially possible. The administration, the Board of Trustees, and dedicated stakeholders are actively fundraising to raise capital that will enable the school to complete this project. Plans for the academic building include five science laboratories and five classrooms, which are being designed with the possibility of adding a gymnasium in the future. Construction plans will reconfigure the layout of the campus and traffic pattern. A construction loan has been approved and guaranteed by MassDevelopment.

Location	Dates of Occupancy
201 Forest Street, Marlborough, MA	February 18, 2005
199 Forest Street, Marlborough, MA	August 30, 2007
165 Forest Street, Marlborough, MA	November 21, 2011

Enrollment

The estimated student application deadline and lottery date for students who are interested in enrolling for the 2024-2025 school year:

Action	Date
Student Application Deadline	February 3, 2024
Lottery	March 1, 2024

APPENDIX E: CONDITIONS, COMPLAINTS, AND ATTACHMENTS

Conditions

In a letter from Commissioner Riley, dated March 25, 2020, AMSA's charter was renewed without conditions. The charter term is five years, beginning July 1, 2020, and expiring on June 30, 2025. *"Based upon the evidence gathered over the past four years regarding the school's academic success, organizational viability, and faithfulness to the terms of its charter and under the authority delegated to me by the Board of Elementary and Secondary Education, I have approved the renewal of the school's charter under Massachusetts General Law chapter 71, section 89, and 603 CMR 1.00."*

Complaints

The AMSA Board of Trustees did not receive any official (written) complaints during the 2022-2023 school year.

APPENDIX E:

Supporting evidence measuring progress with AMSA's Accountability Plan objectives

Objective: AMSA will create an environment that celebrates knowledge and inspires an appreciation of learning. (AMC and Clubs)

Objective: AMSA will challenge all students to the maximum of their ability and current intellectual preparedness with the goal of further advancing their "maximum" level. (Research/Internships)

Race/Ethnicity	% of School	% AMC 8 *	% AMC 10/12 *	% Clubs	% Research
African American	2.8	2.7	3	2.4	4
Asian	11.9	11	25.3	11	14
Hispanic	8.5	9.7	1.6	7.7	3
Native American	0	0	0	0	0
White	69.3	69.3	63.4	71	68
Native Hawaiian/Pacific Islander	0	0	0	0	0
Multi-race	7.6	7.3	6.3	8.1	11

Selected Populations	% of School	% AMC 8 *	% AMC 10/12*	% Clubs	% Research
FLNE	23.6	23.7	25.3	21.6	16.3
ELL	1.4	2.4	0	1	0.0**
Low Income	16.0 (6.6) ***	9	3.1	5.1	4.1
Students with Disabilities	6.8	8.3	0	6.6	6.1

AMC 8: Grades 6-8 *

AMC 10/12: Grades 9-11*

Clubs: Grades 6-12

Research: Grades 10-12

* **AMC 8 Data:** 97% of students in grades 6 through 8 participated in the AMC 8 as part of their mathematics curriculum.

* **AMC 10-12 Data:** Only 15.8% of students in grades 9-11 participated. The exam was optional again this year due to heavy workload and stress related to high stakes testing for students who are also participating in PSAT, SAT, and AP exams, as they continue to narrow content gaps due to COVID.

**The percentage of ELL students in the higher grades is historically very low because most students who receive ELL services in the lower grades move to the FLEP category in high school. This is clearly reflected in the representation of zero ELL students in the Research/Internship program, which is available to students in grades 10, 11, and 12.

***The Low-Income percentage of 16.0 is based on information that is not part of the collection data that AMSA uses to track low-income status. The data that is used for our comparison measure is based on the free and reduced status of our students, which is 6.6 % of the school's total student population. AMSA does not participate in the Federal Lunch Program, which limits our access to Virtual Gateway and the federal program data for students who are receiving SNAP, TAFDC, DCF, Medicaid assistance, or the recently added P-EBT program.